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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,203	09/03/2002	Robert Frederick Aird	P/ 190-138	2468
2352	7590	04/21/2004	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			BLOUNT, ERIC	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 04/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,203

Applicant(s)

AIRD ET AL.

Examiner

Eric M. Blount

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Pre-Amdt 8/20/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 15, 17, 21-23, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 11-14, 20, and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. *On page 2, line 7 and line 8, applicant uses the words "digitises" and "digitised". Spelling corrections are required.*
 - b. *Applicant uses the word "behaviour" throughout the application. Spelling corrections are required.*
 - c. *On page 2, line 20, applicant uses the word "is" between the words image and entered.*Appropriate correction is required.

Claim Objections

2. **Claims 11, 12, 21, and 22** are objected to because of the following informalities:
The preceding claims depend on a canceled claim 1. The Office assumes that the abovementioned claims depend on claim 10. Appropriate correction is required.

Claim 11 is objected to because of the following informalities: The use of the word "and" in line 7 between the words "frequency" and "comprised". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "edge to volume" in both claims is a relative term, which renders the claim indefinite. The term "edge to volume" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Both claims provide for the use of an edge to volume ratio, but, since neither claim sets forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. **Claims 15-19** will not be rejected over art because they cannot be understood. It appears that the claims would be allowable if applicant details what is meant by the vague term discussed above.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Lasenby [U. S. Patent No. 5510772].

As for **claim 10**, Lasenby discloses a method for detecting a flame that comprises receiving a stream of digital images and filtering the images (column 3, lines 62-67 and column 4, lines 1-4). A movement band image is produced wherein the movement band image displays changes in the digital images within a predetermined frequency band after filtering takes place. The predetermined frequency band identifies a characteristic of a flame (column 1, lines 33-61 and column 4, lines 5-11). Lasenby teaches that image parts are compared with a crossing frequency to decide if they fall in a certain range (column 6, lines 17-31).

As for **claim 23**, Lasenby teaches a method for detecting a flame that comprises receiving a stream of individual digital images (column 3, lines 62-67 and column 4, line 1). Lasenby teaches that each image is monitored to create a new image with a predetermined number of pixels. A threshold map is generated by applying a threshold value to each pixel of each image in the stream of images wherein the threshold map determines a relative value of each pixel with respect to said threshold value (column 1, lines 33-41 and column 5, lines 34-40 and column 6, lines 32-33). An awareness map (binary matrix) is generated from the threshold map to detect a sequence of images of flames. The awareness map indicates at least one change in the values of pixels in successive images in the stream of images that cross the threshold (column 6, lines 49-67).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 22, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lasenby in view of Goedeke et al [U.S. Patent No. 5153722].

Lasenby will be relied upon for the teachings as described above. Lasenby does not specifically disclose a method of classifying changes in images as flicker or non-flicker behavior.

As for **claims 21, 22, 25, and 26**, Goedeke et al show a fire detection system and method that comprises a video source for producing live and recorded video (column 4, lines 26-28). A method is disclosed for classifying the changes in a sequence of images as flicker or non-flicker (column 5, lines 40-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to combine the aforementioned references because a combination would result in system that could provide real-time information about an area while using flicker and non-flicker characteristics to reduce false alarms.

Conclusion

7. **Claims 11-14, 20, and 24** are objected to as being dependent upon a rejected base claim, but it appears that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Blount whose telephone number is 703-305-5042. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 703-305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric M. Blount
Examiner
Art Unit 2636



JEFFERY HOFSSASS
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